

**DESCRIPTION**

Under this item the CONTRACTOR shall furnish and install steel traffic signal poles as shown on the plans and as ordered by the ENGINEER.

**MATERIALS**

The steel poles herein specified are to be used for suspending traffic signal heads and luminaires.

Poles shall be the anchor base type and shall be either round or multisided continuously tapered construction 12mm per meter of length. The pole shall have a steel base electrically welded to the butt end of the pole. The anchor base shall telescope the butt end of the pole shaft and shall be continuously welded on the inside bottom and outside top. The pole shaft shall be A0" gauge steel with a butt diameter of 330mm with an 457mm bolt circle. The entire structure shall be hot dip galvanized in accordance with ASTM A123. The pole shall be of one piece having no transverse joints or welds and no more than one longitudinal seam which shall be continuously welded and ground or roller flush. Pole shall be of uniform cross section. The pole diameter shall be uniform at any cross section and the pole shall be straight. The poles shall be furnished with galvanized cast iron or aluminum removable pole caps and anchor bolt covers. Galvanizing shall be in accordance with ASTM A123. Anchor bolt covers shall be attached to the base and pole by hex head bolts.

Poles shall be furnished with a cast aluminum 10mm diameter AJ@ hook bolted to the inside top of the pole or a 10mm diameter galvanized steel AJ@ hook welded inside the top of the pole. A grounding nut having 13mm #13 tapped hole shall be located on the inside of the shaft above the handhole. The poles shall have a 102mm x 203mm reinforced handhole frame and removable cover located 305mm x 381mm from the butt end of the pole.

Poles shall be furnished with 4 - 51mm diameter x 2286mm, 413,700 kPa anchor bolts. Each rod shall be threaded 152mm minimum one end, and supplied with galvanized hexagon nuts, washers and lock nuts. Anchor bolts shall be threaded 152mm and be provided with a 102mm x 102mm x 25mm square steel nut at the base end. Nuts, washers and the top 305mm of the anchor bolts shall be hot dip galvanized. The pole shall have a cable inlet welded to the pole positioned as indicated on the plans. The cable inlet will be of a size to take a 76mm weatherhead. A 76mm weatherhead will also be provided with the pole. The pole shall be fitted with a simplex fitting (two bolt type) as shown on the plans or as directed by the ENGINEER. All welding shall be in accordance with the New York State Steel Construction Manual.

Poles, bases, anchor bolts, nuts, washers, connection devices and pole caps and anchor bolt covers shall be fabricated from material conforming to Section 724-03 of the New York State Standard Specifications.

**CONSTRUCTION DETAILS**

**ITEM 686.9942M      STEEL POLE, 9.8m LONG, SIMPLEX FITTING (ANCHOR BASE)**

Pole erection shall include installation and attachment of fittings as specified on the plans and detail sheets as follows:

- a. Anchor bolt covers
- b. Weatherheads and couplings as required
- c. Service brackets
- d. Pole cap
- e. Cabinet mounting fittings, plates, brackets as needed for the cabinet being installed.
- f. Reinforced couplings for wire entrances to cabinets
- g. Galvanized eyebolts, nuts and washers for attaching span wire assembly.
- h. Galvanized pole clamps with eyes for attaching tether wires.
- i. Field galvanizing shall be done in accordance with Section 719-01 of the New York State Standard Specifications.

**METHOD OF MEASUREMENT**

The poles will be measured for payment as the number of each unit furnished and installed in accordance with the contract documents or as directed by the ENGINEER.

**BASIS OF PAYMENT**

The unit price bid for each pole shall include all the items specified in the construction details and the necessary grounding system, anchor bolts, pole assembly and erections, and field galvanizing as required.

Payments will be made under:

<b><u>Item No.</u></b>	<b><u>Item</u></b>	<b><u>Pay Unit</u></b>
686.9942M	Steel Pole, 9.8m Long, Simplex Fitting (Anchor Base)	EA

**BASIS OF ACCEPTANCE**

Acceptance of poles covered by this specification will be based on manufacturer=s certification of compliance with the specification requirements signed by an officer of the company. Detailed drawings of the poles shall be submitted with the certifications.